

## IN THE CLAIMS

Please substitute the following claims for all previous versions, and listings, of the claims, where any text to be added is indicated by underlining and any text to be deleted is indicated by strikethrough or double square bracketing.

1. **(currently amended)** A microencapsulated catalyst-ligand system comprising a transition metal catalyst palladium (II) salt and a ligand microencapsulated co-encapsulated within a permeable polymer microcapsule shell, wherein the permeable polymer microcapsule shell is formed by interfacial polymerization, the transition metal catalyst and the ligand encapsulated within the permeable polymer microcapsule shell are present in a transition metal catalyst:ligand molar ratio of at least 1:1, and the transition metal catalyst comprises a transition metal selected from the group consisting of platinum, palladium, osmium, ruthenium, rhodium, iridium, rhenium, scandium, cerium, samarium, yttrium, ytterbium, lutetium, cobalt, titanium, chromium, copper, iron, nickel, manganese, tin, mercury, silver, gold, zinc, vanadium, tungsten and molybdenum.
2. **(canceled)**
3. **(canceled)**
4. **(currently amended)** A microencapsulated catalyst-ligand system according to Claim 1, wherein the permeable polymer microcapsule shell is the product of self-condensation and/or cross-linking of etherified urea-formaldehyde resins or prepolymers in which from about 50 to about 98% of the methylol groups have been etherified with a C<sub>4</sub>-C<sub>10</sub> alcohol.
5. **(currently amended)** A microencapsulated catalyst-ligand system according to Claim 1, wherein the permeable polymer microcapsule shell is a polyurea microcapsule prepared from at least one polyisocyanate and/or tolylene diisocyanate.
6. **(currently amended)** A microencapsulated catalyst-ligand system according to Claim 5, wherein the at least one polyisocyanate[[s]] and/or tolylene diisocyanate[[s]] ~~are~~ is selected from the group consisting of 1-chloro-2,4-phenylene diisocyanate, m-

phenylene diisocyanate, (and its hydrogenated derivative of m-phenylene diisocyanate), p-phenylene diisocyanate, (and its hydrogenated derivative of p-phenylene diisocyanate), 4,4'-methylenebis(phenyl isocyanate), 2,4-tolylene diisocyanate, tolylene diisocyanate (60% 2,4-isomer, 40% 2,6-isomer), 2,6-tolylene diisocyanate, 3,3'-dimethyl-4,4'-biphenylene diisocyanate, 4,4'-methylenebis (2-methylphenyl isocyanate), 3,3'-dimethoxy-4,4'-biphenylene diisocyanate, 2,2',5,5'-tetramethyl-4,4'-biphenylene diisocyanate, 80% 2,4- and 20% 2,6-isomer of tolylene diisocyanate, polymethylene polyphenylisocyanate (PMPII), 1,6-hexamethylene diisocyanate, isophorone diisocyanate, tetramethylxylene diisocyanate and 1,5-naphthylene diisocyanate.

7. (canceled)
8. (canceled)
9. (canceled)
10. (currently amended) A microencapsulated catalyst-ligand system according to Claim 9 wherein the ligand is an organic moiety comprising one or more heteroatoms selected from N, O, P and S.
11. (currently amended) A microencapsulated catalyst-ligand system according to Claim 10, wherein the ligand is an organic ligand of formula (1):



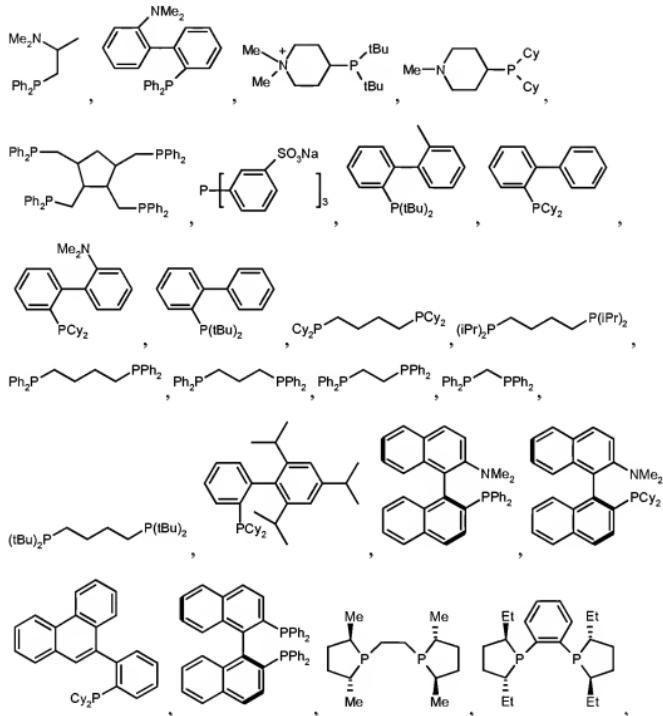
(1)

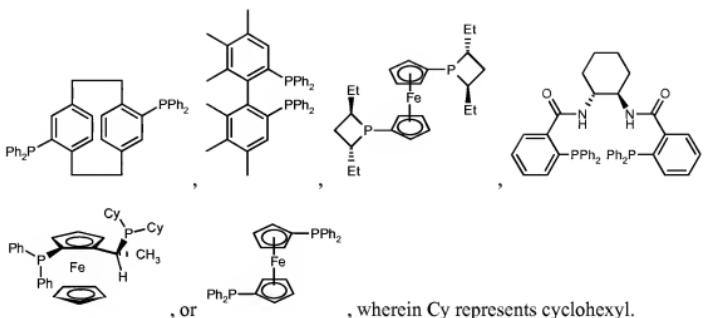
wherein:

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are each independently an optionally substituted hydrocarbyl group, an optionally substituted hydrocarboxy group, or an optionally substituted heterocyclyl group or one or more of R<sup>1</sup> & R<sup>2</sup>, R<sup>1</sup> & R<sup>3</sup>, R<sup>2</sup> & R<sup>3</sup> optionally being linked in such a way as to form an optionally substituted ring(s).

12. (currently amended) A microencapsulated catalyst-ligand system according to Claim 11, wherein the ligand is PMe<sub>2</sub>CF<sub>3</sub>, P(OEt)<sub>3</sub>, P(Et)<sub>3</sub>, P(Bu)<sub>3</sub>, P(cyclohexyl)<sub>3</sub>, PPhEt<sub>2</sub>, PPh<sub>2</sub>Me, PPh<sub>3</sub>, P(CH<sub>2</sub>Ph)<sub>3</sub>, P(CH<sub>2</sub>Ph)Ph<sub>2</sub>, P(p-tolyl)<sub>3</sub>, P(o-C<sub>6</sub>H<sub>4</sub>OMe)<sub>3</sub>, P(OPh)<sub>3</sub>, P(O-p-tolyl)<sub>3</sub>, P(p-C<sub>6</sub>H<sub>4</sub>OMe)<sub>3</sub>, P(o-tolyl)<sub>3</sub>, P(m-tolyl)<sub>3</sub>, PMe<sub>3</sub>, PPhMe<sub>2</sub>, PPh<sub>2</sub>Et, P(i-Pr)<sub>3</sub>,

P(*t*-Bu)<sub>3</sub>, PPhCH<sub>2</sub>Ph, PPh<sub>2</sub>OEt, PPh(OEt)<sub>2</sub>, P(O-*o*-tolyl)<sub>3</sub>, P(OMe)<sub>3</sub>, P(*n*-Pr)<sub>3</sub>, PPh(*i*-Pr)<sub>2</sub>, PPh<sub>2</sub>(*i*-Pr), PPhBu<sub>2</sub>, PPh<sub>2</sub>Bu, P(*i*-Bu)<sub>3</sub>, PPh(cyclohexyl)<sub>2</sub>, PPh<sub>2</sub>(cyclohexyl), P(CH<sub>2</sub>Ph)<sub>2</sub>Et, P(CH<sub>2</sub>Ph)Et<sub>2</sub>, P(C<sub>6</sub>F<sub>5</sub>)Ph<sub>2</sub>, P(*p*-C<sub>6</sub>H<sub>4</sub>F)<sub>3</sub>, P(*p*-C<sub>6</sub>H<sub>4</sub>Cl)<sub>3</sub>, P(C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>Ph, P(*o*-C<sub>6</sub>H<sub>4</sub>F)<sub>3</sub>, P(*o*-C<sub>6</sub>H<sub>4</sub>Cl)<sub>3</sub>, P(2-furanyl)<sub>3</sub>, P(2-thienyl)<sub>3</sub>, P(*n*-octyl)<sub>3</sub>, P(*p*-C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>)<sub>3</sub>,





13-34. (canceled)

35. (canceled)

36. (currently amended) A microencapsulated catalyst-ligand system according to Claim 35 claim 1, wherein the transition metal catalyst palladium (II) salt is palladium acetate.

37. (currently amended) A microencapsulated catalyst-ligand system according to Claim 35 claim 1, wherein the permeable polymer microcapsule shell is prepared from polymethylene polyphenyl di[-]isocyanate; the transition metal catalyst palladium (II) salt is palladium (II) acetate; and the ligand is triphenylphosphine.